

Amendments to the Claims

1. (ORIGINAL) A method of binarizing images containing linear structures, and particularly images of prints from the skin, characterized in that areas are determined that are each distinguished by a preset approximate direction of the structures and in that the areas of the image that are determined are each filtered with a Gabor filter adapted to the given direction.
2. (ORIGINAL) A method as claimed in claim 1, characterized in that the determination of the areas takes place, tile by tile of the tiles into which the image is divided, with further Gabor filters of corresponding directions.
3. (ORIGINAL) A method as claimed in claim 2, characterized in that four further Gabor filters are used.
4. (ORIGINAL) A method as claimed in claim 3, characterized in that the directions of the further Gabor filters are determined by angles of 22.5°, 67.5°, 112.5° and 157.5° to an edge of the image.
5. (CURRENTLY AMENDED) A method as claimed in ~~any of claims 2 to 4~~claim 2, characterized in that, for the determination of the areas from the filter responses tile by tile of the tiles into which the image is divided, a variance is derived in each case from the given filter response and in that tiles having a variance that is greater than a preset threshold value are assigned to the given area.
6. (ORIGINAL) A method as claimed in claim 5, characterized in that the derivation of the variances is performed for tiles that overlap one another.
7. (ORIGINAL) A method as claimed in claim 6, characterized in that, at a resolution of approximately 500 dpi, the size of the tiles used for deriving the variance is 16 x 16 pixels, which tiles are each processed in steps of eight pixels.

8. (CURRENTLY AMENDED) A method as claimed in ~~any of the foregoing~~
~~claims~~claim 1, characterized in that the pixels are adapted to the environment, as
predominant at the time, of the given pixel by smoothing filers.

9. (CURRENTLY AMENDED) A method as claimed in ~~any of the foregoing~~
~~claims~~claim 1, characterized in that the surface area of the areas so far determined is
established and in that areas whose surface area is of less that a preset size are
suppressed.

10. (ORIGINAL) A method as claimed in claim 9, characterized in that the
surface area is established by tracing the outlines of the areas by means of an edge-
tracing algorithm.

11. (ORIGINAL) A method as claimed in ~~any of claims 2 to 10~~claim 2,
characterized in that tiles for which, when direction was determined, the response of
one of the Gabor filters gave a recognizable direction, are filtered with a Gabor filter
adapted to this direction, in that tiles for which, when direction was determined, the
responses of the Gabor filters gave two adjoining recognizable directions, are filtered
with a Gabor filter adapted to the mean direction, and in that tiles for which no
direction was determined or for which, when direction was determined, the responses
of the Gabor filters gave two non-adjacent directions, are not filtered.

12. (CURRENTLY AMENDED) A method as claimed in ~~any of the foregoing~~
~~claims~~claim 1, characterized in that the image is binarized prior to the filtering with
Gabor filters adapted to direction.

13. (ORIGINAL) A method as claimed in claim 12, characterized in that, to
allow the image to be binarized, a threshold value is derived from a histogram of the
image covering those pixels in which there is clear information on direction, and in
that the threshold value is selected in such a way that half of the pixels are lighter than
the threshold value and half are darker.

14. (CURRENTLY AMENDED) A method as claimed in ~~either of claims 12 or 13~~claim 12, characterized in that further binarization takes place after the filtering with Gabor filters adapted to direction.

15. (CURRENTLY AMENDED) System for binarizing images containing linear structures, and particularly images of prints from the skin, using a method according to ~~one of the preceding claims~~claim 1.